

Staff Report

DISCUSSION AND DIRECTION ON THE GREEN VEHICLE INITIATIVE

Honorable Mayor and Council Members:

Summary:

City Council provided direction to staff regarding the establishment of a program to encourage residents to purchase Partial Zero Emission Vehicles and Zero Emission Vehicles.

Background:

Council provided direction on October 9, 2007, to establish a \$250 voucher program to encourage residents to purchase Partial Zero Emission Vehicles (PZEV) and Zero Emission Vehicles (ZEV). The \$250 vouchers could be used for any City service or fee.

Discussion:

The key elements of the proposed voucher program is outlined as follows:

- A \$250 voucher will be provided to any resident who purchases a PZEV or ZEV after the program is adopted.
- A maximum of 20 vouchers (\$5,000) will be issued each year.
- The vouchers may be used for any City service or fee.
- Sales contract for the eligible vehicle must be submitted to the City within 3 months of the purchase of the vehicle.
- The resident must provide proof of residency to be eligible for the voucher program

Fiscal Impact:

There will be no fiscal impact on any City services or fees. The \$5,000 allocated for the Green Vehicle Initiative will offset any vouchers used for a City service or fee.

Public Contact:

Public contact consists of the City Council agenda.

Recommendation:

It is recommended the Council discuss and provide direction on the implementation of the Green Vehicle Initiative.

Alternatives:

- 1. Refer back to staff for further information or other options.
- 2. Deny the request.

Attachments:

- A. Green Vehicle Initiative
- B. Discussion and Direction Green Vehicle Initiative dated October 2, 2007

Respectfully submitted,

Raymond E. Davis, III, PE, PTOE

Director of Public Works

Jack R. Crist

City Manager

Contact:

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Green Vehicle Initiative

Purpose:

The purpose of the Green Vehicle Initiative is to encourage Belmont residents to purchase vehicles that are Partial Zero-Emission or Zero Emission vehicles to reduce vehicle emissions and the carbon footprint that an individual's vehicle has in the City of Belmont and the environment as a whole.

Program Description:

The City of Belmont will give a \$250 voucher that may be used for any City of Belmont services to any resident residing within the Belmont city limits who purchases any eligible vehicle. A maximum of 20 vouchers (\$5,000) will be issued in a fiscal year.

Definitions:

CARB: California Air Resources Board

PZEV: Partial Zero-Emission Vehicles per CARB that have nearly zero emissions and a

15-year/150,000 mile warranty on its emission control equipment. This includes

bio-diesel vehicles.

Voucher: Certificate issued by the City of Belmont for any City related services

ZEV: Zero Emission Vehicles per CARB with no tailpipe emissions. These vehicles

include all electric and CNG vehicles.

Eligibility:

A resident wishing to participate in the Green Vehicle Initiative and be eligible for a voucher must provide the following proof to the Director of Public Works:

- 1) Any two of the following:
 - Valid California driver's license showing a Belmont address
 - Utility bill showing current residency
 - Current rent or lease agreement
 - Current voter's registration
- 2) Sales contract with Belmont address for the PZEV or ZEV vehicle purchased

The sales contract must be submitted to the City within 3 months of the purchase of the vehicle to be eligible for the voucher program.



Voucher Program:

The City will provide a \$250 voucher to any resident who meets all the eligibility requirements outlined in the Green Vehicle Initiative. A maximum of 20 vouchers will be issued in a fiscal year. The voucher may be used in place of money for any City of Belmont related service or fee ranging from Parks and Recreation programs to building permits.

Term of the Green Vehicle Initiative:

The Green Vehicle Initiative will be reviewed and renewed on an annual basis as part of the City's Annual Budget Process.

Council Agenda <u>#7A</u> Meeting of October 9, 2007



Staff Report

DISCUSSION AND DIRECTION ON THE GREEN VEHICLE INITIATIVE

Honorable Mayor and Council Members:

Summary:

City Council indicated they wanted to develop a program to encourage Belmont residents to purchase vehicles that have a low emission to improve the air quality within the City of Belmont and the region as a whole.

City staff seeks direction on various policy questions so that a "Green Vehicle Initiative" can be drafted and adopted by the City Council.

Background:

Councilmember Warden took note to a citizen's concern expressed during the discussion on the proposed Smoking Ordinance that the City is not doing anything about reducing the impact of motor vehicles on the air quality within the City of Belmont. He raised the issue with the City Council and received concurrence for City staff to explore an incentive program for residents to purchase hybrid vehicles. However, hybrids are not the only type of vehicle that may have a minimal impact on the environment. The incentive program was expanded to address all vehicles with minimal emission impacts.

Discussion:

Exhaust emission standards limit the amounts of key pollutants coming from a vehicle's tailpipe and leaks in its fuel system. All new vehicles for sale in the United States are certified to meet either the Federal emission standards, set by the U.S. Environmental Protection Agency (EPA), or California standards, set by the California Air Resources Board (CARB). The California emission standards are stricter than the Federal standards and are proposed to be the guidelines used for the City's Program.

California has a new set of Phase II low emission vehicle standards. These standards are generally cleaner than the Phase I low-emission standards. They are as follows.

LEV II: Low-Emission Vehicle, the least stringent of the new, Phase II LEV standards. NOx emissions are one-quarter the level of a LEV I-certified vehicle.

ULEV II: Ultra-Low-Emission Vehicle, a mid-level Phase II LEV standard. Hydrocarbon and carbon monoxide emission levels are nearly 50% lower than those of a LEV-II vehicle.

SULEV II: Super-Ultra-Low-Emission Vehicle, a California standard even tighter than the ULEV II, including significantly low NOx emissions and more durable control systems.

PZEV: Partial Zero-Emission Vehicle, complaint with the SULEV standard: additionally has near-zero emissions and a 15-year/150,000 mile warranty on its emission control equipment. Bio-diesel vehicles are considered PZEV vehicles.

ZEV: Zero-Emission Vehicle, a California standard prohibiting any tailpipe emissions. Zero emission cars are CNG and electric cars.

Automakers also rate their vehicles for fuel economy according to standard EPA tests of simulated city and highway driving. Fuel economy standards apply to manufacturers, rather than to individual vehicles. A manufacturer can sell models of varying fuel economy so long as their average fuel economy meets the standard.

Higher fuel economy means lower fuel consumption, savings on fuel costs, and reduced global warming emissions. However, even in new vehicles, tailpipe standards don't fully reflect pollution in real-world driving conditions or the pollution associated with the fuel consumed. Among models meeting a given tailpipe standards, higher fuel economy means lower total emission of other pollutants as well.

When the public thinks low emission vehicles they typically think of the Toyota Prius Hybrid (60 MPG in City) and the Honda Civic Hybrid (49 mps in the City). Both of these vehicles are PZEV. The following tables indicate other vehicle models that are PZEV and their respective City MPG rating.

Vehicle Model	Specifications	MPG:
		City
Subcompacts		
Volkswagon New Beetle	2.5L 5, auto stk	23
Chevrolet Cobalt	2.2L 4, manual	25
Pontiac G5	2.2L 4, manual	25
Compact Cars		
Honda Civic GX	1.8L 4, auto CNG	28
Honda Civic Hybrid	1.3L 4, auto CVT	49
Mazda 3	2.0L 4, manual	28
Ford Focus	2.0L 4, manual	27

Vehicle Model	Specifications	MPG:
		City
Midsize Cars		
Toyota Prius Hybrid	1.5L 4, auto CVT	60
Nissan Altima Hybrid	2.5L 4, auto CVT	42
Toyota Camry Hybrid	2.4L 4, auto CVT	40
Hyundai Elantra	2.0L 4 auto	28
Nissan Altima	2.4L 4, manual	26
Midsize Wagons		
Ford Focus Wagon	2.0L 4, auto	27
Ford Focus Wagon	2.0L 4, manual	27
Subaru Legacy 2.5i/ 2.5i SE Wagon	2.5L 4 auto stk Awd	23
Subaru Legacy 2.5i/ 2.5i SE Wagon	2.5L 4 manual Awd	22
Subaru Legacy 2.5i Limited Wagon	2.5L 4 auto stk Awd	23
Large Cars		
Chevrolet Impala	3.5L 6, auto	21
Buick Lucerne	3.8L 6, auto	19
Compact SUV's		
Ford Escape Hybrid	2.3L 4, auto CVT	36
Mercury Mariner Hybrid	2.3L 4, auto CVT 4wd	32
Subaru Forester 2.5 X/Sports 2.5X	2.5L 4, manual, Awd	22

There are two vehicles that are SULEV II rated. They are:

Vehicle Model	Specifications	MPG: City	
Midsize SUV's			
Toyota Highlander Hybrid	3.3L 6, auto CVT	32	
Lexus RX 400h	3.3L 6, auto CVT	32	

There are a number of vehicle models that are ULEV II rated and have City MPG that exceed many of the PVEZ vehicles. Therefore, a policy based upon fuel economy alone may not be desirable.

Vehicle Incentive Program

There are two ways to provide incentives for the Green Vehicle Initiative. One is to provide a direct cash incentive. The other is to establish a voucher program to the Belmont residents who purchase eligible Green Vehicle Initiative vehicles. The voucher may be used by the resident within a specified time period for any Park and Recreation program and/or City fees.

The voucher program may be considered a mechanism to attracting new users of the City's programs. However, it should be noted, the use of voucher for any program will reduce the actual revenue generated by a particular program or service provided by the City. A mechanism needs to be established to insure that any program or fee will be made whole as part of the voucher program.

Discussion and Direction

The following policy questions need to be answered to provide City staff with direction to prepare the Green Vehicle Initiative:

- 1. Do we just consider ZEV and PZEV vehicles?
- 2. Should there be a minimum city mpg with PZEV vehicles?
- 3. Is this program solely for vehicles purchased after the Green Vehicle Initiative is adopted?
- 4. If the Green Vehicle Initiative is retro-active, how may years back do we establish for eligible vehicles?
- 5. Want to provide cash incentive or a voucher program?
- 6. What should be the dollar value for each party eligible for the Green Vehicle Initiative?
- 7. What should be the total amount allocated to the Green Vehicle Initiative for the first year?
- 8. Is City staff authorized to apply for any grants that may potentially fund the Green Vehicle Initiative?
- 9. Will the City's General Fund offset any vouchers used for Parks and Recreation programs or services?

Will the City's General Fund offset any vouchers used to pay for any City related fees?

General Plan/Vision Statement

No impact.

Fiscal Impact:

No fiscal impact.

Public Contact:

Posting of City Council agenda.

Recommendation

Staff is requesting Council to answer the policy questions that need to be answered to provide City staff with direction to prepare the Green Vehicle Initiative.

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- Take no action.
- Refer back to staff for further information. 2.
- 3. Deny the request.

Attachments C. None

Respectfully submitted,

Raymond E. Davis, III, PE, PTOE Director of Public Works

Jack R. Crist City Manager

Contact:

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